

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): David L. Reese, et al.

Serial No.: 09/322,443

Art Unit: 2122

Filed: May 28, 1999

Examiner: Chameli Das

Title: PROFILING OF COMPUTER PROGRAMS EXECUTING IN VIRTUAL
MEMORY SYSTEMS

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

1. In accordance with 37 C.F.R. §§1.56, 1.97 and 1.98, Applicant wishes to make of record the items listed on the accompanying Form PTO-1449. Applicant respectfully requests the Examiner to fully consider the items and independently ascertain their teaching before issuance of the next action, and to make them of record in the file. The Examiner is also requested to initial and return a copy of the enclosed Form PTO-1449 to evidence such consideration.

2. The references listed on the enclosed Form 1449 are references that have come to light in applications listed in the Information Disclosure Statement of October 2000. Applicant has not reviewed all of them in detail. Of those that have been reviewed, none of the references are believed to be any more pertinent than the references already considered. However, in an abundance of caution, Applicant requests that they be considered.

3. For non-patent items listed on the enclosed Form PTO-1449 for which a copy is not already made of record in this application, a copy was previously cited by or submitted to the Patent and Trademark Office in application Serial No. 09/239,194, filed January 28, 1999.

4. This Information Disclosure Statement is being filed with a Request for Continued Examination filed concurrently herewith. No fee is due, pursuant to 37 C.F.R. §1.97(b)(4).

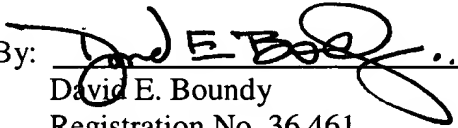
I certify that this correspondence, along with any documents referred to therein, is being deposited with the United States Postal Service on September 28, 2004 as First Class Mail in an envelope with sufficient postage addressed to The Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

5. The Commissioner is hereby authorized to charge any additional fees that may be required for this Information Disclosure Statement, or credit any overpayment, to Deposit Account 23-2405, Order No. 114596-06-4003.

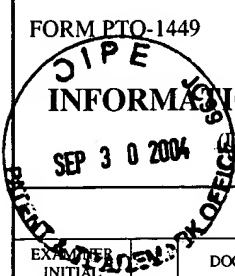
Respectfully submitted,

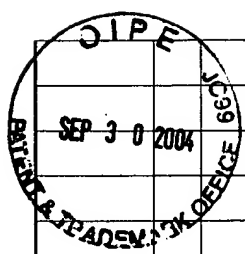
WILLKIE FARR & GALLAGHER, LLP

Dated: September 28, 2004

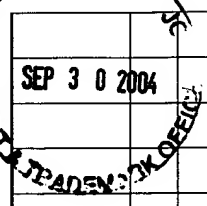
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FORM PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 114596-06-4003		SERIAL NO. 09/322,443	
				APPLICANT David L. Reese, et al.			
				FILING DATE May 28, 1999		GROUP ART UNIT 2122	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	4,412,303	10/25/1983	Barnes	712	16	Oct. 25, 1983	
	4,514,803	04/30/1985	Agnew	364	200	Apr. 26 1982	
	4,750,112	06/07/1988	Jones	364	200	Feb. 10, 1984	
	4,779,187	10/18/1988	Letwin	712	229	Apr. 10, 1985	
	4,812,975	03/14/1989	Adachi	364	300	Jul. 11, 1984	
	5,043,878	08/1991	Ooi	712	42		
	5,115,500	05/19/1992	Larsen	711	202	Jan. 11, 1988	
	5,127,092	06/30/1992	Gupta	712	234	Jun. 15, 1989	
	5,155,835	10/13/1992	Belsan	711	114	Nov. 19, 1990	
	5,241,664	08/31/1993	Ohba	711	121	Jan. 7, 1991	
	5,241,638	08/31/1993	Mork	711	207	Aug. 12, 1995	
	5,301,287	04/05/1994	Herrell	711	202	Feb. 16, 1993	
	5,307,504	04/26/1994	Robinson	395	800	Mar. 7, 1991	
	5,335,331	08/02/1994	Murao	712	203	Jul. 12, 1991	
	5,339,422	8/16/1994	Brender	714	4	Mar. 7, 1991	
	5,355,487	11/11/1994	Keller	717	127	Jul. 23, 1993	
	5,361,340	11/01/1994	Kelly	711	3	Mar. 9, 1993	
	5,386,563	01/31/1995	Thomas	712	228	Oct. 13, 1992	
	5,404,476	04/04/1995	Kadaira	711	207	Mar. 9, 1993	
	5,432,795	07/11/1995	Robinson	371	19	May 15, 1991	
	5,454,117	09/26/1995	Puziol	395	800	Aug. 25, 1993	
	5,479,616	12/26/1995	Garibay	712	212	Apr. 3, 1992	
	5,481,684	01/02/1996	Richter	712	212	Jul. 20 1994	
	5,481,693	01/02/1996	Blomgren	712	225	Jul. 20, 1994	
	5,483,647	01/09/1996	Yu	713	100	Dec. 17, 1992	
	5,487,156	01/23/1996	Popsescu	712	217	Dec. 5, 1990	
	5,507,028	04/09/1996	Liu	395	375	Jan. 9, 1995	
	5,515,518	06/07/1996	Stiles	395	375	Jul. 5, 1994	
	5,542,059	07/30/1996	Blomgren	395	375	Dec. 21, 1994	
	5,560,013	09/24/1996	Scalzi	717	138	Dec. 6, 1994	
	5,568,646	10/22/1996	Jaggar	712	209	Sep. 19, 1994	
	5,574,927	11/12/1996	Scantlin	395	800	Nov. 12, 1996	
	5,590,309	12/31/1996	Chencinski	395	472	Apr. 1, 1994	
	5,598,546	01/28/1997	Blomgren	712	209	Aug. 31, 1994	
	5,608,886	03/04/1997	Blomgren	395	586	Aug. 31, 1994	



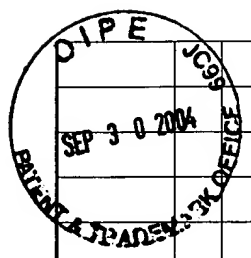
	5,613,114	3/1997	Anderson	718	108	
	5,613,118	03/18/1997	Heisch	395	709	Jun. 20, 1994
	5,619,666	04/08/1997	Coon	712	209	Jun. 2, 1995
	5,625,835	4/1997	Ebcioğlu	712	23	
	5,628,016	05/06/1997	Kukol	717	140	June 15, 1994
	5,636,366	06/03/1997	Robinson	395	490	Oct. 30, 1995
	5,652,869	07/29/1997	Herdeg	703	23	Dec. 28, 1994
	5,657,474	08/12/1997	Taine	711	163	Nov. 20, 1995
	5,659,679	08/19/1997	Alpert	395	183.1	May 30, 1995
	5,659,782	08/19/1997	Senter	712	23	Sep. 16, 1994
	5,664,159	09/02/1997	Richter	395	500	May 8, 1995
	5,673,407	09/30/1997	Poland	395	375	Mar. 8, 1994
	5,678,032	10/14/1997	Woods	395	500	Sept. 6, 1995
	5,685,009	11/04/1997	Blomgren	395	800	Nov. 29, 1995
	5,715,421	02/03/1998	Akiyama	711	213	Oct. 16, 1992
	5,721,927	02/24/1998	Baraz	395	705	Aug. 7, 1996
	5,732,238	03/24/1998	Sarkozy	711	135	Jun. 12, 1996
	5,742,780	04/21/1988	Caulk	395	382	Jan. 16, 1997
	5,751,982	05/12/1998	Morley	395	800	Mar. 31, 1995
	5,754,878	05/19/1998	Asghar	395	800	Mar. 18, 1996
	5,764,947	06/09/1998	Murphy	703	20	Mar. 2, 1994
	5,768,500	6/16/1998	Agrawal	714	47	Jun. 20, 1994
	5,774,287	06/30/1998	Leonhardt	710	33	Dec. 9, 1994
	5,774,686	06/30/1998	Hammond	395	385	Jun. 7, 1995
	5,781,750	07/14/1998	Blomgren	395	500	Jan 11, 1994
	5,781,758	07/14/1998	Morley	395	500	Mar. 23, 1995
	5,781,792	07/14/1998	Asghar	395	800.35	Mar. 18, 1996
	5,784,640	07/21/1998	Asghar	395	800.35	Mar. 18, 1996
	5,790,824	08/04/1998	Asghar	395	385	Mar. 18, 1996
	5,794,068	08/11/1998	Asghar	395	800.35	Mar. 18, 1996
	5,802,337	09/01/1998	Fielden	712	216	Dec. 29, 1995
	5,805,877	09/08/1998	Black	395	586	Sep. 23, 1996
	5,812,864	09/22/1998	McCoy	703	26	Dec. 6, 1995
	5,815,720	9/29/1998	Buzbee	717	158	Mar. 15, 1996
	5,819,064	10/06/1998	Razdan	703	27	Nov. 8, 1995
	5,838,962	11/17/1998	Larson	395	586	Apr. 9, 1997
	5,838,978	11/17/1998	Buzbee	395	705	Oct. 9, 1996
	5,847,955	12/08/1998	Mitchell	700	86	Jun. 23, 1997
	5,854,913	12/29/1998	Goetz	712	210	Jun. 10, 1997
	5,864,697	01/26/1999	Shiell	712	240	Jun. 27, 1997
	5,870,763	02/09/1999	Lomet	707	202	Mar. 10, 1997



	5,884,057	03/16/1999	Blomgren	395	375	May 8, 1995
	5,901,308	05/04/1999	Cohn	712	244	Mar. 18, 1996
	5,903,750	05/11/1999	Yeh	712	236	Nov. 20, 1996
	5,903,751	05/11/1999	Hoyt	395	585	Sep. 16, 1997
	5,903,760	05/11/1999	Farber	395	707	Jun. 27, 1996
	5,905,855	05/18/1999	Klaiber	395	183.07	Feb. 28, 1997
	5,911,073	06/08/1999	Mattson	395	701	Dec. 23, 1997
	5,920,721	07/06/1999	Hunter	395	705	Jun. 11, 1997
	5,935,220	08/10/1999	Lumpkin	710	5	Aug. 9, 1996
	5,941,827	02/1996	Holtey	711	163	Jan. 14, 1994
	5,958,061	09/28/1999	Kelly	714	1	Jul. 24, 1996
	5,960,198	09/28/1999	Roediger	717	130	Mar. 19, 1997
	5,966,537	10/1999	Ravichandran	717	158	
	5,968,162	10/19/1999	Yard	712	203	Apr. 2, 1996
	5,983,335	11/09/1999	Dwyer	712	23	Apr. 30, 1997
	5,999,736	12/07/1999	Gupta	717	158	May 9, 1997
	6,002,872	12/14/1999	Alexander	717	127	Mar. 31, 1998
	6,003,038	12/14/1999	Chen	707	103R	March 31, 1997
	6,005,551	12/21/1999	Osborne	345	161	Apr. 25, 1997
	6,006,029	12/21/1999	Bianchi	395	500.45	Sept. 28, 1993
	6,006,033	12/21/1999	Heisch	717	158	Aug. 15, 1994
	6,006,277	12/21/1999	Talati	709	313	Jan. 26, 1996
	6,011,908	01/04/2000	Wing	395	182.17	Dec. 23, 1996
	6,014,735	01/11/2000	Chennupaty	712	210	Mar. 31, 1998
	6,021,265	02/01/2000	Nevill	712	209	Apr. 14, 1997
	6,021,484	02/01/2000	Park	712	41	Nov. 14, 1997
	6,021,489	02/01/2000	Poplingher	712	239	Jun. 30, 1997
	6,026,478	02/15/2000	Dowling	712	24	Dec. 23, 1997
	6,029,004	02/22/2000	Bortnikov	717	158	Mar. 17, 1997
	6,029,222	02/22/2000	Kamiya	710	262	Jan. 10, 1997
	6,031,992	02/29/2000	Cmelik	395	705	Jul. 5, 1996
	6,032,247	02/29/2000	Asghar	712	35	Nov. 14, 1997
	6,035,393	03/07/2000	Glew	712	237	May 7, 1998
	6,044,220	03/28/2000	Breternitz	717	139	Feb. 25, 1997
	6,044,221	03/28/2000	Gupta	717	151	May 9, 1997
	6,047,390	04/2000	Butt	714	43	
	6,052,771	4/18/2000	Heller	712	34	Jan. 20, 1998
	6,061,711	05/2000	Song	718	108	
	6,070,009	05/30/2000	Dean	717	130	Nov. 26, 1997
	6,071,317	06/2000	Nagel	717	128	
	6,076,144	6/13/2000	Peled	711	125	Dec. 1, 1997



	6,081,665	06/27/2000	Nilsen	717	116	Dec. 19, 1997
	6,081,890	06/27/2000	Datta	713	1	Nov. 30, 1998
	Re. 36,766	07/04/2000	Krauskopf	711	203	Aug. 21, 1992
	6,092,188	07/18/2000	Corwin	712	239	Jul. 7, 1999
	6,115,809	09/05/2000	Mattson	712	239	Apr. 30, 1998
	6,119,204	9/12/2000	Chang	711	141	Jun. 30, 1998
	6,119,218	9/2000	Arora	712	207	
	6,141,683	10/31/2000	Kraml	709	220	Jan. 30, 1998
	6,154,857	11/28/2000	Mann	714	30	Dec. 17, 1997
	6,157,970	12/05/2000	Gafken	710	27	Sep. 24, 1997
	6,163,764	12/19/2000	Dulong	717	138	Oct. 12, 1998
	6,175,957	01/16/2001	Ju	717	156	Dec. 9, 1997
	6,202,205	03/13/2001	Saboff	717	9	Jul. 21, 1998
	6,205,545	03/20/2001	Shah	712	237	Apr. 30, 1998
	6,212,493	04/03/2001	Huggins	703	22	Dec. 1, 1998
	6,219,774	04/17/2001	Hammond	711	202	Mar. 25, 1998
	6,226,789	05/01/2001	Tye	717	138	Jan. 29, 1996
	6,233,678	05/15/2001	Bala	712	240	Nov. 5, 1998
	6,237,073	05/22/2001	Dean	711	202	Nov. 26, 1997
	6,237,074	05/22/2001	Phillips	711	213	May 26, 1995
	6,240,526	05/29/2001	Petivan	714	11	Oct. 27, 1999
	6,243,804	06/05/2001	Cheng	712	228	Jul. 22, 1998
	6,253,215	06/26/2001	Agesen	707	206	Aug. 17, 1998
	6,256,728	07/03/2001	Witt	712	236	Jul. 6, 1998
	6,260,191	07/10/2001	Santhanam	717	9	Apr. 7, 1997
	6,289,445	09/2001	Ekner	712	244	
	6,295,644	09/25/2001	Hsu	717	9	Aug. 17, 1999
	6,298,477	10/02/2001	Kessler	717	145	Oct. 30, 1998
	6,304,948	10/16/2001	Motoyama	711	162	Oct. 6, 1998
	6,308,318	10/23/2001	Krishnaswamy	717	139	Oct. 7, 1998
	6,308,321	10/23/2001	Schooler	717	132	Dec. 11, 1998
	6,336,135	01/01/2002	Niblett	709	215	Nov. 19, 1998
	6,351,784	02/26/2002	Neal	710	308	Dec. 28, 1998
	6,351,844	2/26/2002	Bala	717	128	Nov. 5, 1998
	6,353,924	03/05/2002	Ayers	717	128	Feb. 8, 1999
	6,363,336	03/26/2002	Banning	703	26	Oct. 13, 1999
	6,397,379	05/28/2002	Yates	717	140	Oct. 28, 1999
	6,405,327	06/11/2002	Sipple	714	39	Aug. 19, 1998
	6,453,292	09/17/2002	Ramaswamy	704	235	Oct. 28, 1998
	6,463,582	10/08/2002	Lethin	717	158	Oct. 21, 1998
	6,470,442	10/22/2002	Arimilli	712	32	Jul. 30, 1999



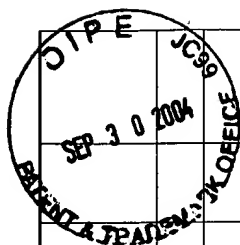
	6,470,492	10/22/2002	Bala	717	128	May 14, 1999
	6,473,846	10/29/2002	Melchior	711	170	Jun. 16, 2000
	6,477,683	11/05/2002	Killian	716	1	Feb. 5, 1999
	6,480,862	11/12/2002	Gall	707	3	Apr. 23, 1999
	6,481,007	11/2002	Iyer	717	151	
	6,496,922	12/17/2002	Borrill	712	209	Oct. 31, 1994
	6,496,923	12/17/2002	Gruner	712	213	Dec. 17, 1999
	6,549,930	04/15/2003	Chrysos	709	104	Nov. 26, 1997
	6,557,094	04/29/2003	Pechanek	712	209	Sep. 28, 2001
	6,560,693	05/06/2003	Puzak	712	207	Dec. 10, 1999
	6,571,331	05/27/2003	Henry	712	239	Apr. 3, 2001
	6,631,514	10/07/2003	Le	717	137	
	6,631,518	10/07/2003	Bortnikov	717	158	Mar. 19, 1997
	6,678,820	01/2004	Kahle	712	239	Mar. 30, 2000

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	EP 0 324 308 Larsen	07/19/1989	EPO	G06F	9/30		
	WO 97/50031 Farber	12/31/1997	PCT/US	G06F	9/455		
	WO 98/13740 Wing	04/02/1998	PCT/US	G06F			
	WO 98/28689 Wing	07/02/1998	PCT/US	G06F	11/00		
	WO 98/38575 Klaiber	09/03/1998	PCT/US	G06F	11/00		
	WO 98/59292 Cmelik	12/30/1998	PCT/US	G06F	9/45		
	WO 99/03037 Kelly	01/21/1999	PCT/US	G06F	11/00		
	WO 99/08188 Kelly	02/18/1999	PCT/US	G06F	11/00		
	WO 99/08191 Kelly	02/18/1999	PCT/US	G06F	12/00		

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

	Ammons, Ball and Larus: Exploiting Hardware Performance Counters with Flow and Context Sensitive Profiling, Proceedings of the ACM SIGPLAN 1997 Conference on Programming Language Design and Implementation, pp. 85-96 (1997)
	Brad Calder, Peter Feller, Alan Eustace, Value Profiling, Proceedings of 30th International Symposium on Microarchitecture (Micro-30), IEEE, pages 259-269 (December 1-3, 1997)
	Compaq Computer Corp., Compiler Writer's Guide for the Alpha 21264 (1999) www.alphalinux.org/archives/axp-list/June1999/0475.html
	Dean, ProfileMe: Hardware Support for Instruction-Level Profiling on Out-of-Order Processors," Proceedings of 30th Annual Intl. IEEE/ACM Symp. on Microarchitecture, pp. 292-302 (Dec. 1997)



		Reiner W. Hartenstein, Jürgen Becker: Performance Analysis in CoDe-X Partitioning for Structural Programmable Accelerators; Proc. of 5th Int'l Workshop on Hardware/Software Co-Design CODES/CASHE '97, Braunschweig, Germany, p. 141 (March 1997)
		Hollingsworth, Critical Path Profiling of Message Passing and Shared-Memory Programs, IEEE Transactions on Parallel and Distributed Systems vol. 9, no. 10, pp. 1029-1040 (October 1998)
		Intel Corporation, Intel Architecture Software Developer's Manual, <i>passim</i> (1997)
		Intel Corporation, Intel Processor Family Developer's Manual (1997), pages 1-1 to 1-6, 2-1 to 2-20
		Intel Corporation, Intel Processor Family Developer's Manual (1997), vol. 3 (Architecture and Programming Manual), pages 3-1 to 3-3, 3-10 to 3-13, 12-1 to 12-27, 14-1 to 14-30
		Jones, Puzzling with Microcode, ACM SIGARCH Computer Architecture News, vol. 11, no. 5, pp. 8-12 (1983)
		Kavi et al., A Performability Model for Soft Real-Time Systems, IEEE Proceedings of the 27th Annual Hawaii International Conference on System Sciences, pp. 571-579 (1994)
		Kim and Tyson: Analyzing the Working Set Characteristics of Branch Execution, Proceedings of the 31st Annual ACM/IEEE International Symposium on Microarchitecture, pp. 49-58 (Dec. 1998)
		Monica S. Lam, Robert P. Wilson, Limits of Control Flow on Parallelism, Proceedings of the 19th Annual International Symposium on Computer Architecture, p.46-57 (May 1992)
		Larus and Schnarr: EEL: Machine-Independent Executable Editing, EEL: Machine-independent executable editing. In Proceedings of the ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI), 1995
		M. Lipasti and J. Shen. Exceeding the Data-Flow Limit Via Value Prediction, 29th International Symposium on Microarchitecture, pages 226-237, IEEE (Dec. 1996)
		Magnusson and Werner, Efficient Memory Simulation in SimICS, Proceedings of the 28th Annual Simulation Symposium, IEEE, pp. 62-73 (1995).
		Mueller, Rustagi and Baker: MiThOS - A Real-Time Micro-Kernel Threads Operating System, IEEE Real-Time Systems Symposium 1995: pp. 49-55 (1995)
		Park et al., Evaluation of Scheduling Techniques on a SPARC-Based VLIW Testbed, Proceedings of the 30th annual ACM/IEEE international symposium on Microarchitecture, pp. 104-113 (1997)
		Parkinson and Parameswaran, Profiling in the ASP Codesign Environment, Proceedings of the 8th International Symposium on System Synthesis, Cannes, France, p.128-133 (Sept. 1995)
		Rizvi et al., Execution-Driven Simulation of a Superscalar Processor, IEEE Proceedings of the 27th Annual Hawaii International Conference on System Sciences, pp. 185-194 (1994)
		Veen: Dataflow Machine Architecture, ACM Computing Surveys vol. 18 no. 4 pp. 365-96 (December 1986)
EXAMINER		DATE CONSIDERED